

# RECLAMATION

*Managing Water in the West*

## **Federal Hydropower Strategic Planning Workshop**

**Reliability Standards - Compliance**



U.S. Department of the Interior  
Bureau of Reclamation

# Reclamation's Power Facilities

- 58 power plants with 14,780 megawatts of capacity
- 194 generating units
- 37 billion kilowatt hours generated (enough to serve 4 million homes)
- 2<sup>nd</sup> largest hydropower utility in United States

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# Reclamation's Power Facilities

- Average power plant size 254.2 MW
- Average unit size: 77 MW
- Largest unit size: 805 MW
- Smallest unit size: 350 kW
- Average age: 48 years
- Many plants are remotely operated

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# Grand Coulee

- 6,809 MW
- 33 units



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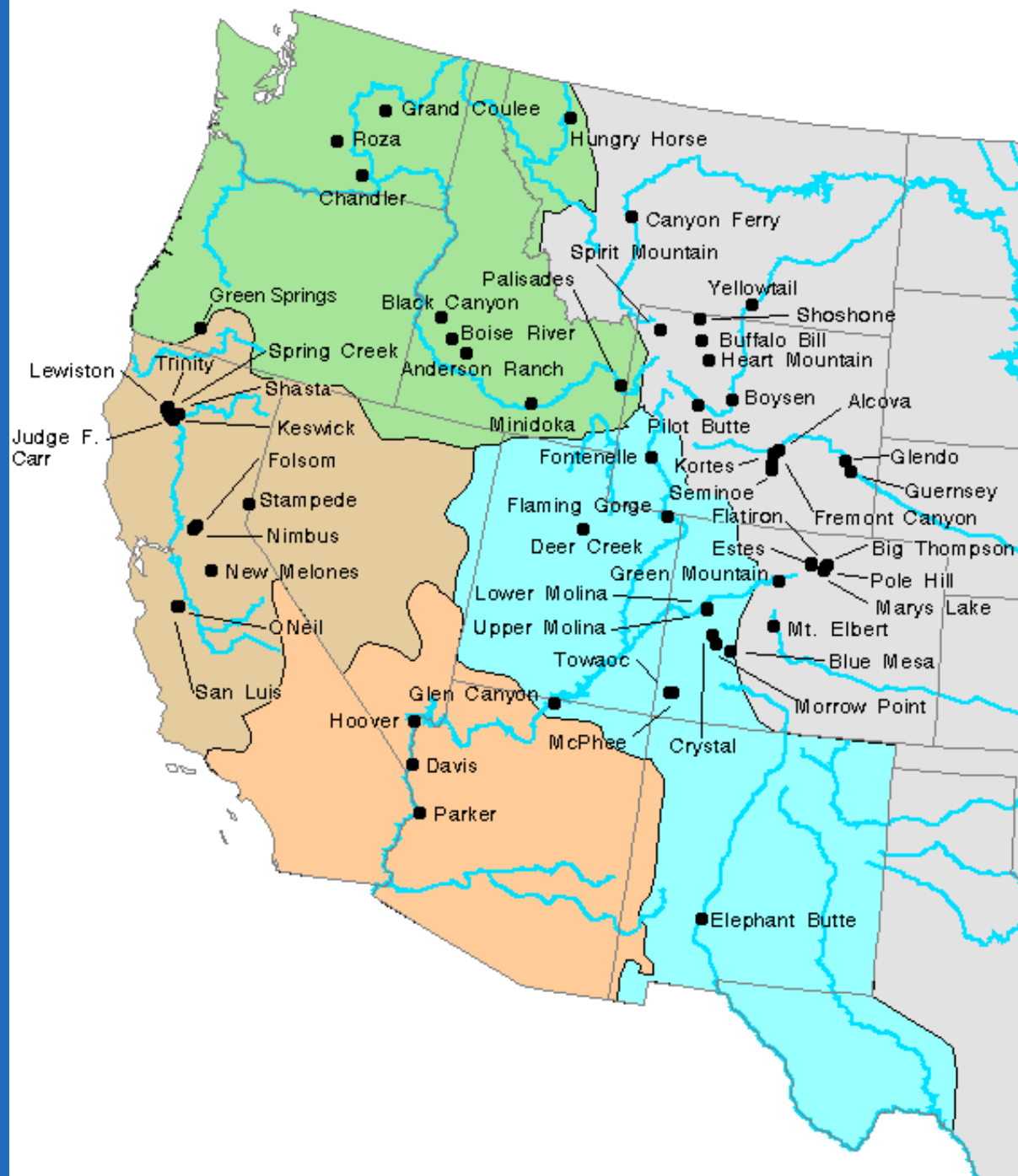
# Lewiston

- 350 kw

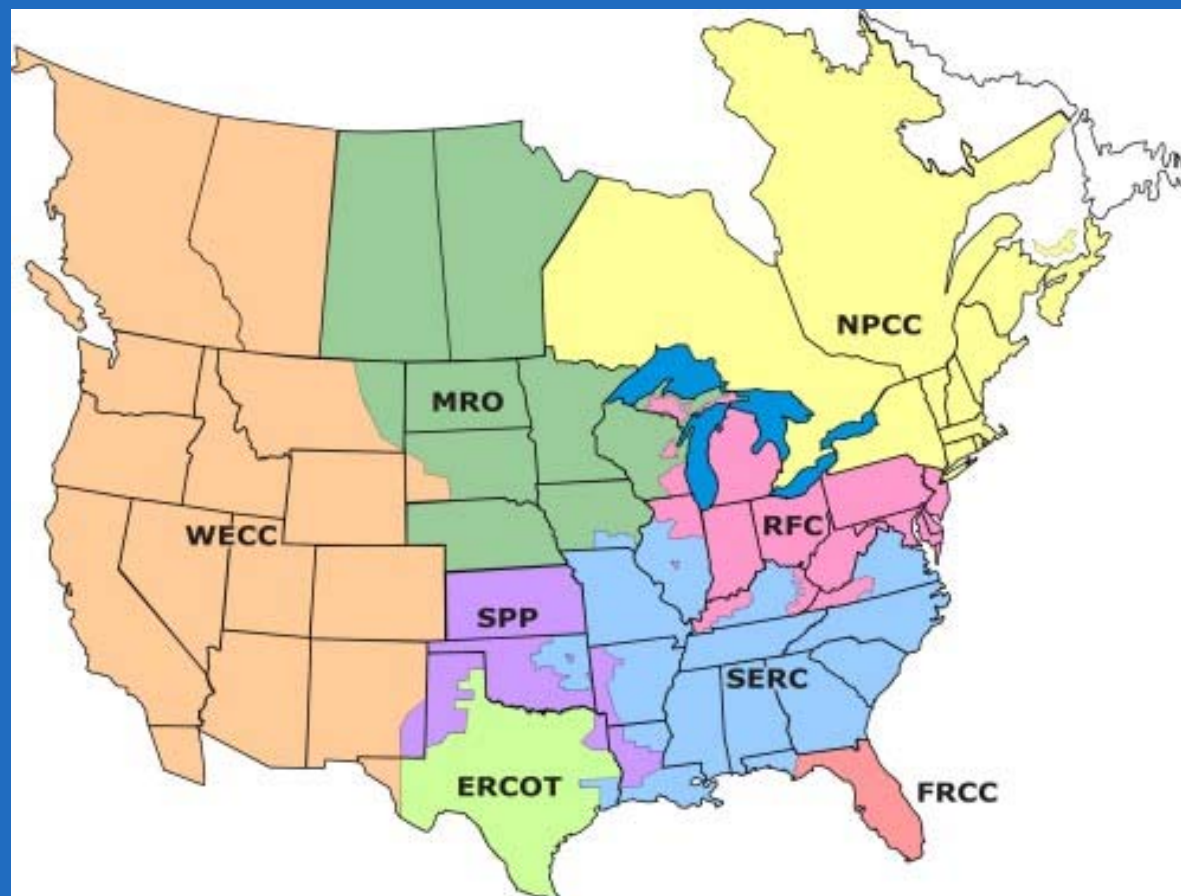


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# Site Map

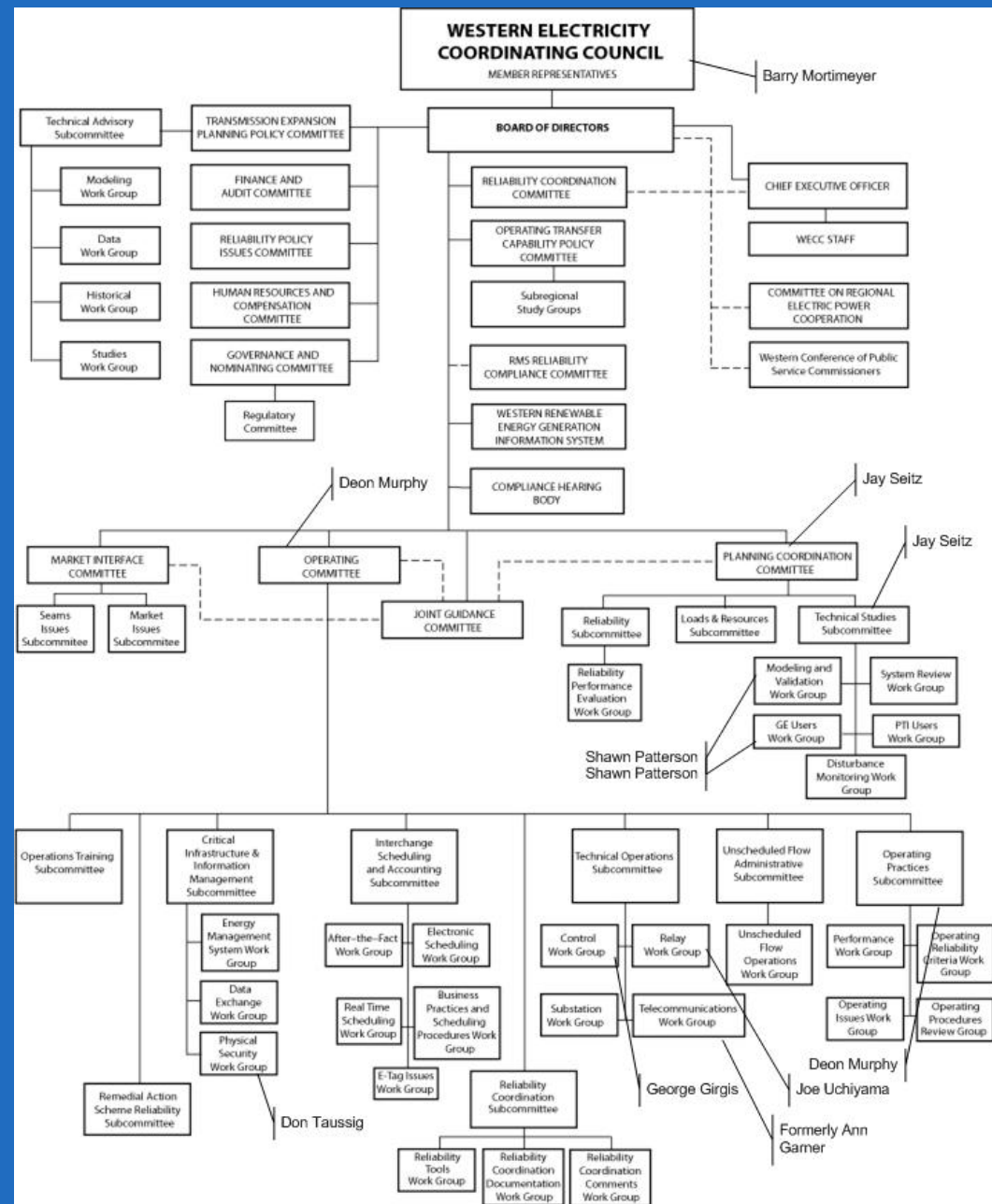


# NERC Footprint



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# WECC Organization Chart



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# WECC Committee Representation

- WECC Council
- Operating Committee
- Planning Coordination Committee
- Technical Studies Subcommittee
- Modeling and Validation Work Group
- Control Workgroup
- Operating Practices Subcommittee
- Relay Workgroup
- Physical Security Workgroup

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# NERC Registration

- Reclamation registered (Feb 2006) as:
- Generator Owner
- Generator Operator
- Transmission Owner

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# Mitigation Plans

- May 2007 Reclamation submitted 9 mitigation plans
- BAL-005-0 - Automatic Generation Control
- CIP-001-1 - Sabotage Reporting
- FAC-008-1 - Facility Ratings Methodology
- FAC-009-1 - Establish Facility Ratings
- PRC-004-1 - Protection System Misoperations
- PRC-005-1 - Protection Maintenance/Testing
- PRC-015-0 - SPS Data Documentation
- PRC-016-0 - SPS Misoperations
- PRC-017-0 - SPS Maintenance/Testing

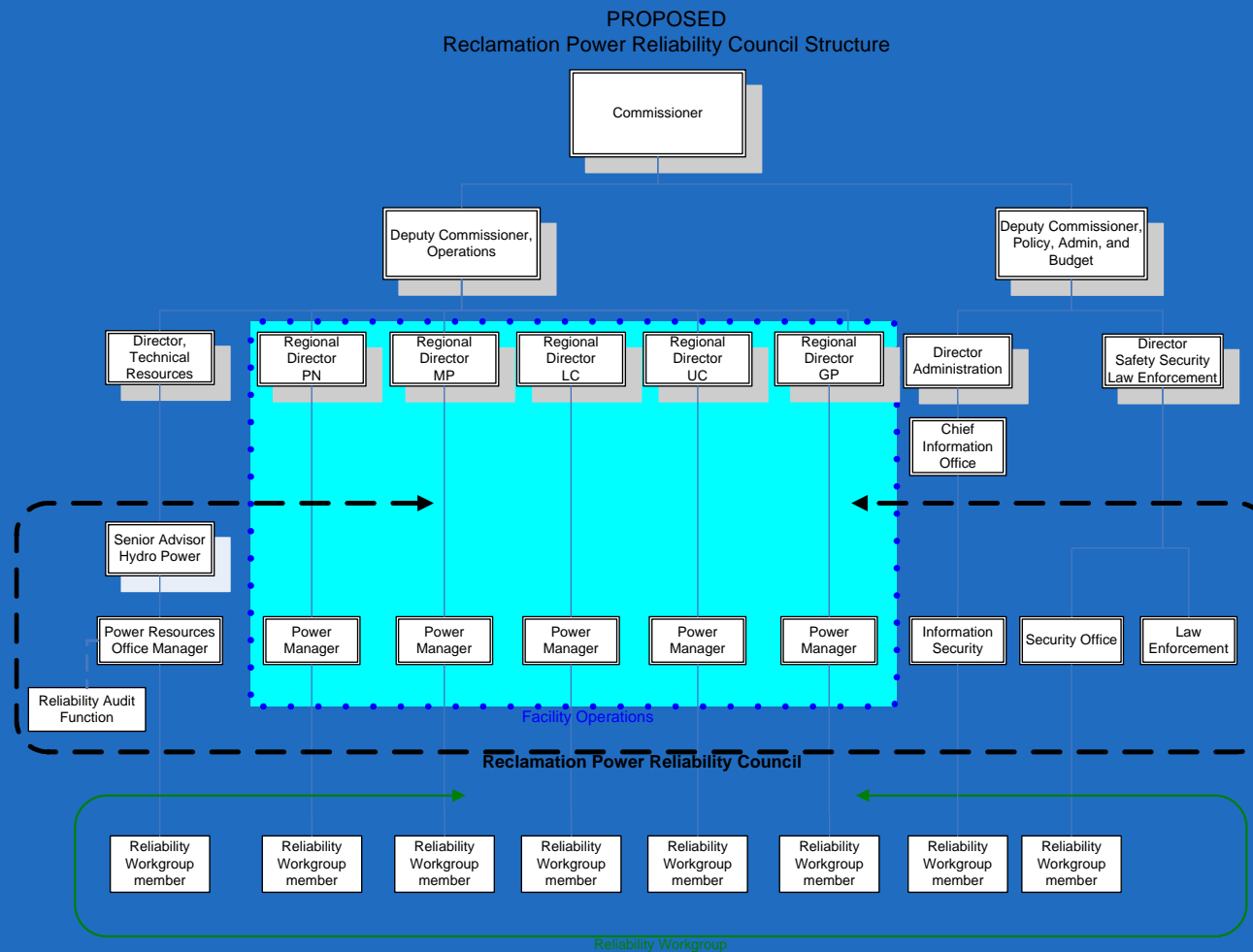
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# Organization Changes

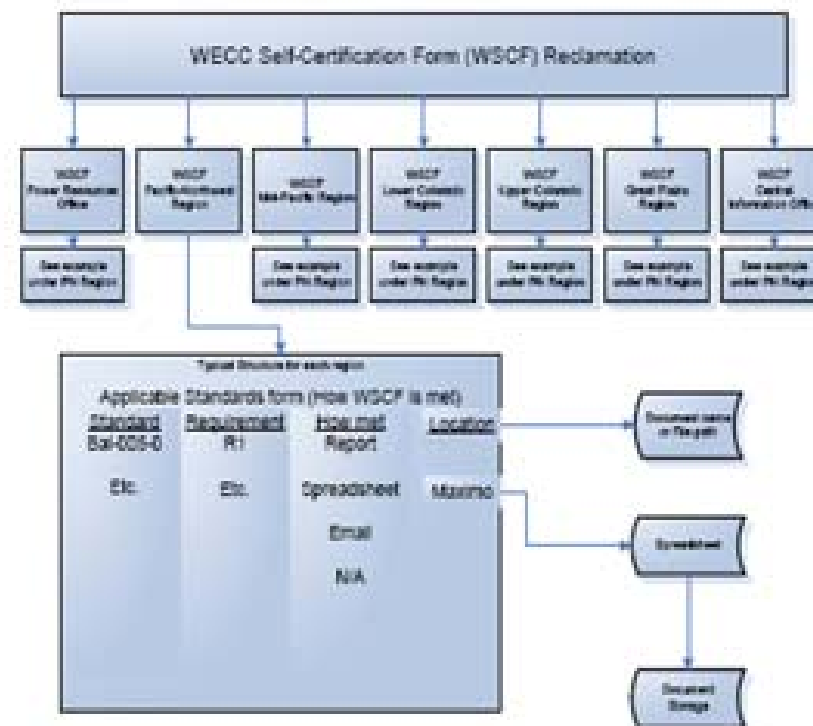
- **Senior Level Position**
  - Senior Advisor, Hydropower
  - Member of Reclamation Leadership Team
- **Power Resources Office**
  - Moved to Deputy Commissioner – Operations
  - Provides corporate focus on reliability issues
- **Reliability Council**
  - Governing body overseeing compliance
  - Uniform response, coordination and focus

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# Reliability Council



# Self-Certification Plan



# PRC-005-1 Documentation July 2008

Unit	Protection System Component	Maintenance Interval	Summary Testing and Maintenance	Last Maint. Comp Date Comp WO #	Maintenance Within Interval	Next Scheduled Maintenance
Hungry Horse U1	11G1B Gen multi-function	10 yr	Job Plan #	Jan 2005 Comp WO #	Yes	
	CT QG1-1	5 yr	Job Plan #	Jan 2006	Yes	
	PT VT1	5 yr	Job Plan #	Jan 2006	Yes	
	Sta Battery 130 VDC	12 mos	Job Plan #	July 2007 Comp WO #	Yes	
	Battery Chgr	12 mos	Job Plan #	July 2007 Comp WO #	Yes	
	Control Circuit Functional Test	3-6 yrs	Job Plan #	Jan 2006 Comp WO #	Yes	

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